

AMENDMENTS

Prior to considering the comments below, please make the following amendments.

IN THE CLAIMS

Please replace pending claim 12 with the following clean but amended claim.

12. (Five Times Amended) A method of testing the chronic effect on neural or muscle tissue samples of chemical substances comprising:

providing a detector, wherein the detector comprises a plurality of microelectrodes on a substrate configured to contact the tissue sample and apply an electric stimulus to the tissue sample;

contacting said neural or muscle tissue sample with the plurality of electrodes;

measuring the electrical properties of the neural or muscle tissue sample;

adding said chemical substance to the neural or muscle tissue sample;

measuring the electrical properties of the neural or muscle tissue sample at a time which measures chronic response to said chemical substance; and

comparing said electrical properties before and after said addition of said chemical substance to determine whether said added chemical substance has had an influence on the neural or muscle tissue sample.